DOCUMENT RESUME

ED 460 702 JC 990 212

TITLE	Learning Disabilities Eligibility Model. Introduction & Overview.
INSTITUTION	California Community Colleges, Sacramento. High-Tech Center for the Disabled.
PUB DATE	1999-00-00
NOTE	46p.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Community Colleges; Educational Assessment; *Eligibility; *Learning Disabilities; Services; *Special Needs Students; *Student Evaluation; Student Needs; Two Year Colleges
IDENTIFIERS	*California Community Colleges

ABSTRACT

This document provides an overview of the California Community Colleges Learning Disabilities Eligibility Model. The model provides a uniform system for identifying adults who are eligible for learning disabilities services within the California Community Colleges. Research for the development of the model included an examination of the clinical characteristics of adult students with learning disabilities, surveys of specialists from both within the community college system and at the national level, the development of assessment instruments designed to measure ability and achievement, and several pilot and test-retest studies. The resulting model contains the following six components of eligibility: (1) intake screening, (2) measure achievement, (3) ability level, (4) processing deficit, (5) aptitude-achievement discrepancy and (6) eligibility recommendation. Students are judged on the basis of this model and are considered eligible if they have met the specified criteria for each component. Detailed descriptions of the research process and each of the six components are included. A section on policy-related questions and answers is provided that addresses assessment-related issues such as funding, use of existing data, record keeping, testing standards, training in the eligibility procedures for LD specialists, assessment of a variety of student populations, curriculum requirements, assessing outcomes, and verification. An exemplar case study is also included. (SKF)

Reproductions supplied by EDRS are the best that can be made
from the original document.

California Community Colleges

ED 460 702

Learning Disabilities Eligibility Model

Introduction & Overview

California
Assessment System
for Adults with
Learning Disabilities

TC 026212

To all of the Learning
Disabilities Specialists and Students
in the California Community Colleges

1996 Revision Edited by:

Marcia Krull, *LD Specialist*
Mt. San Jacinto College

Kirsten Colvey, *LD Specialist*
Crafton Hills College

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
S. Hamilton
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

To all of the Learning
Disabilities Specialists and Students
in the California Community Colleges

1996 Revision Edited by:

Marcia Krull, *LD Specialist*
Mt. San Jacinto College

Kirsten Colvey, *LD Specialist*
Crafton Hills College

Paula Jacobs, *LD Specialist*
Saddleback College

Research Edition

The original project was funded in part through a grant provided bythe United States Department of Education.

© 1996 by the California Community Colleges Chancellor's Office.
All Rights Reserved.

The Chancellor's Office grants permission to California Community College campuses to reproduce this document.

The Chancellor's Office of the California Community Colleges is an Equal Opportunity Employer

Printed in the United States of America

Production Coordination and Design:
Paulie Kimball

P_K
Publications

The revision of this manual was funded through the
California Community Colleges
Disabled Student Programs and Services Unit
with support from:

Staff

Thelma Scott-Skillman
Vice Chancellor

Albert Salgado
Specialist

Desiree Nascimento
Program Analyst

Kaylene Hallberg
Dean

Patrick Conklin
Program Analyst

Georgianna Wells
Office Technician

Chancellor's Office
California Community Colleges
1107 Ninth St.
Sacramento, CA 95814

Contents

Executive Summary

Introduction

History and Overview

Learning Disabilities Eligibility Process

Learning Disabilities Definition

Description of Components and Procedures

1. Intake Screening Component
2. Measured Achievement Component
3. Ability Level Component
4. Processing Deficit Component
5. Aptitude-Achievement Discrepancy Component
6. Eligibility Recommendation Component

Statewide Policy Issues

Standards for Development and Implementation
Ethical Standards
Professional Judgment

Computer Assisted Recordkeeping and Scoring Program (CARS)

Major Policy Questions and Answers

Funding for LD Assessment
Use of Previous Test Data
Record Keeping
Standards for Educational and Psychological Tests
Determination of LD Eligibility
Minimum Qualifications for LD Specialists
Training in the Eligibility Procedures for LD Specialists
Appropriate Use of Paraprofessionals in the LD Assessment Process
Assessment of Returning Students
Assessment of Students under Age 18
LD Program Eligibility for Minority Students
LD Program Eligibility and the Americans with Disabilities Act (ADA)
Special Class Admittance
Curriculum Requirements of the LD Program
Repeatability of Special Classes
Measurable Progress
Serving Students with Other Disabilities
Verification of Students Who Are Developmentally Delayed Learners (DDL)
Discontinuing the LD Assessment Process
Appropriate Use of Individual Assessment Instruments
Standard Error of Measurement

Case Study
Referral

1. Intake Screening Component
2. Measured Achievement Component
3. Ability Level Component
4. Processing Deficit Component
5. Aptitude-Achievement Discrepancy Component
6. Eligibility Recommendation Component

APPENDIX A

Computations in the Processing Deficit Component

APPENDIX B

Computations in the Aptitude-Achievement Discrepancy Component

Executive Summary

The current California Community Colleges Learning Disabilities Eligibility Model is the result of a two phase development and validation process. In 1981, the California Community Colleges Chancellor's Office formed a consortium with the LD Interest Group of the California Association on Post-Secondary Education and Disability (CAPED) and the Institute for Research on Learning Disabilities at the University of Kansas (KU-IRLD) to develop a uniform system to identify adults who are eligible for learning disabilities services within the California Community Colleges. The model was developed to (a) provide an operational definition of the learning disability construct for the college system and (b) reduce or eliminate the inequities, inconsistencies and biases that characterized previous eligibility models. This system, which was implemented in 1987, includes a databased eligibility model for use in the state's community college learning disability pro grams. Phase two, which was initiated in 1991 and implemented in July 1994, responded to field concerns regarding the original model. The issues addressed were (a) the need to evaluate the merits of using norms based on the community colleges' population; (b) the addition of newly published versions of tests used in the model; (c) the need to incorporate new tests into the model which would have less of an emphasis on verbal ability; (d) the need to incorporate assessment measures which could be used for instructional programming; (e) the lack of rep resentation from noncredit and adult education students in the model's technical characteristics; (f) the demand for more reliable, content appropriate measures of adaptive behavior; and (g) the need to include tests that have test protocols available.

The development of the model combined the efforts of experts in a broad range of disciplines: special education, educational measurement, psychology, policy analysis, decision theory, and speech and language. At each significant juncture in the development process, major stakeholder groups (including practitioners and state agencies) participated in the deliberations on issues of planning, implementa tion, data analysis, presentations, and reporting. This development process provided a valued secondary product in addition to the eligibility model: the integration of specific research interests with the policy-related realities of the nation's largest community college system. In addition, it is important to understand that assessment for the purpose of determining eligibility is only one of the services avail able in the LD programs. Intervention is the primary service provided for those students included in these programs.

This model, as it was originally conceived and in its current revision, blends two critical attributes of any accurate and equitable diagnostic process: (a) the professional's clinical skills and (b) standardized procedures and criteria. These attributes are reflected in the six components of the current eligibility model, which is the result of eight years of research in the colleges. Major phases of the research process and its results are highlighted below:

- Clinical characteristics of the adult student with learning disabilities were identified through a literature review, a survey of learning disabilities specialists in the community college system, and a national survey of educators, counselors, advocacy groups, and other service providers.
- The clinical characteristics were operationalized in specific test instruments to assist college personnel in the eligibility determination.
- Five assessment instruments of ability and achievement were identified according to established psychometric standards to ensure greater equity across the colleges.
- In the first study, a normative database including 1800 subjects - 900 randomly selected community college students and 900 students who had been identified on their campuses as learning disabled - were assessed on a variety of self-reporting, achievement, ability, and diagnostic instruments. A database on each group was established to provide baseline data on which students with learning disabilities and their community college peers could be compared and alternative LD eligibility models could be simulated. Students from over 60 college campuses participated. From this data statewide norms were obtained to provide a measurement of com munity college students' performance on commonly used assessment instruments.
- In 1991-1992 a study of 617 additional students was completed. The sub jects in this group included 453 randomly selected community college students and 164 students who had previously been identified as having a learning disability. Based on the results, several changes were made to the original model. The definition was revised eliminating the adaptive behavior construct, thereby reducing the components in the model from the original seven to six; national norms were adopted for evaluating students' status on most

measures of ability and achievement; and new tests as well as the latest revisions of several of the tests used in the original model were incorporated.

- Groups concerned with the eligibility criteria were included as stake holders in determining specific cut-off scores for the eligibility model. These groups represented college administration, state control agencies, the Board of Governors of the California Community Colleges, the legislature, college instructors, LD specialists, ancillary service providers, advocacy and student groups, and vocational rehabilitation services.
- Eleven standards were specified as "yardsticks" for the development of the eligibility model. These standards provided a guideline for developing and evaluating each component, procedure, and criterion of the model.
- An eligibility model was developed that incorporated clinicians' skills and standardized the components, procedures, and criteria for determining students with learning disabilities. The resulting model includes multiple components that evaluate the student using normative and informal procedures. These procedures yield information in the areas of presenting problems, educational, family, medical and vocational histories, language proficiencies, academic and vocational achievement, expected achievement levels, and information processing skills.
- Training and evaluation processes have been adopted to ensure that (a) examiners adhere to correct implementation procedures, (b) implemen tation issues and questions could be addressed, and (c) continued research could be effectively carried out.
- The Computer Assisted Recordkeeping and Scoring (CARS) program was developed to streamline the scoring and recordkeeping functions required of the eligibility model. This program allows LD specialists to enter the raw scores from the various assessment instruments and use the resulting standard scores to evaluate whether or not a student meets each of the eligibility criteria. The program also maintains a database with the eligibility records for each student and is designed to provide the LD specialist with demographic information.

The major focus of these efforts was the development of an operational definition of learning disabilities that could be used in the California community colleges. For the current model, the LD definition was operationalized in six eligibility components, including an Intake Screening component, four assessment-based components, and an eligibility compo nent. These six components are briefly described below.

- *Component 1: Intake Screening.* Self-report and interview procedures are completed with the student to elicit information regarding his or her current difficulties, educational history, health history, career goals, family history, language proficiencies, and employment experiences. This in formation provides a basis for understanding the student's perspective, choosing appropriate assessment instruments, and interpreting the student's performance within his or her familial, educational and cultural experience.
- *Component 2: Measured Achievement.* The student with learning disabilities exhibits areas of strengths and weaknesses. This uneven or inconsistent profile in skills is evaluated in the Measured Achievement component. The procedures in this component identify those academic or employment set tings in which the student has been successful and further distinguish the student with learning disabilities from one better characterized as a low achiever.
- *Component 3: Ability Level.* Procedures in this component indicate the student's potential for success in the general community college curriculum.
- *Component 4: Processing Deficit.* This component's procedures evaluate the student's weaknesses in acquiring, integrating, storing, retrieving, and expressing information.
- *Component 5: Aptitude-Achievement Discrepancy.* This component's procedures identify those academic areas in which the student's achievement is significantly less than that of peers with the same ability level.
- *Component 6: Eligibility Recommendation* . The LD specialist analyzes and synthesizes all of the assessment information to determine the best explanation for the student's performance. The specialist also determines whether the student is eligible for services as a learning disabled student within the community college system, and therefore for funding through the California Community Colleges Disabled Student Programs and Services allocation model.

The original model included a seventh component. Appropriate adaptive behavior, or the ability to behave in a manner that is socially appropriate to the setting, was identified as a characteristic of the adult student with learning disabili ties. It is also a characteristic which separates learning disabilities from other types of learning impairments, such as mental retardation and psychological disorders. This component, called *Adaptive Behavior*, sought to establish whether or not the student's behavior was appropriate to the community college environment. Operationalizing this component, however, was problematic since there is no stan dardized instrument designed for or normed on this population. Since certification of this component relied heavily, if not completely, on professional judgment, it was inconsistent with one of the main attributes of the model, that is, eligibility decisions are made as a result of a blend of the professional's clinical skills with standardized procedures and criteria.

Although great effort was directed to ensure the eligibility model's reliability and validity, all students meeting the first five components' criteria are not necessarily learning disabled. Other explanations could account for the student meeting the components' criteria, such as inconsistent educational experience, emotional disturbance, acquired brain impairment, a poor match between previous instructional emphasis and the assessment instrument, the effects of medication, and errors in the instruments. Thus, the LD specialist is confronted with two questions in the Eligibility Recommendation component: Is this student's performance best explained by learning disabilities? If not, do I want to serve this student in the LD program anyway?

Using this model, students judged eligible for the LD programs have met the specified criteria for *each* of the components, and accordingly, the college is entitled to state reimbursement for providing services. Alternatively, if the student does not meet one or more component's criteria, he or she may still receive services in the local college's LD program. However, if this option is selected, associated costs are borne by the local college. Most students judged ineligible are referred to other appropriate services available on the campus, such as counseling, tutorial services, learning resource center, and so on.

The determination of whether a student meets a component's criterion is always made by the LD specialist. The eligibility model specifies a set of stan dardized normative and informal assessment instruments that are available. The choice as to which instruments will be used is made on the basis of the examiner's skills, the student characteristics, and the presenting problem(s).

The original eligibility model was implemented statewide in October 1987, and the revised model was in full use by July 1994. Implementation has incorporated (a) training programs for all certificated LD specialists; (b) review and in-service training; (c) organization of a Field Advisory Group composed of LD specialists to establish a regional communication linkage; (d) implementation of a campus visitation project for providing requested technical assistance; (e) bulletins from the Chancellor's Office for communicating policy and responses to technical questions; and (f) monitoring of the model's outcomes in the age, gender, and racial character istics of students participating in LD programs.

This summary has briefly described a comprehensive model implemented in the California Community Colleges for assessing students and determining eligibility for LD services. In any such summary, many important details are omitted. Further description of the eligibility model is presented in this document and in the manuals developed in conjunction with this document, available through the Chancellor's Office.

Introduction

This document is one of three manuals describing the California Community Colleges' Learning Disabilities Eligibility Model. Each manual provides specific details about the LD Eligibility Model and its application within the California Community Colleges system. The three manuals are intended for different audiences and uses. For example, a college specialist, program coor dinator, or dean might be particularly interested in this document, as it provides an introduction and overview of the eligibility model including basic information about the model, its historical basis and development, operational procedures for implementation, and a case study applying the model.

The second manual, entitled *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services*, is intended for the practitioner. Its content includes the information needed for applying the eligibility model with individual students. Therefore, the manual contains the technical information and sequential steps to be followed in utilizing the model. Also included in the manual is the Intake Screening and Eligibility Record, which is a reproducible document used with each student who provides written consent for completing the evaluation process. The document contains three separate sections: (1) the Consent form, (2) the Intake Interview form, and (3) the Eligibility Record. The Consent form describes the eligibility process for the student and requires the student's signature prior to formal testing. The Intake Interview includes questions concerning the student's presenting problems, college goals, language fluency, and educational, vocational, medical, and family histories. The Eligibility Record is completed by the LD specialist and provides a record of the procedures and criteria used and the outcome of the evaluation process. Other reproducible materials used by the LD specialist in the eligibility process include scoring keys, stimulus materials, record forms, and test protocols; these materials may also be found in this second manual.

The third manual contains directions for using the Computer Assisted Recordkeeping and Scoring (CARS) program. The purpose of this program is to provide a time-efficient system for scoring and storing the assessment data generated through use of the LD Eligibility Model. This program, which was developed in response to requests from the field, minimizes individual scoring error and facilitates procedural consistency throughout the state.

History and Overview

Learning disabilities have been identified as a significant cause of learning problems among students in the California Community Colleges. To be successful in college, these students may need special instructional programs and services. The number of students with learning disabilities attending California Community Colleges has increased in recent years to nearly 22,000, or approximately 1.6% of the total enrollment in the 106 community colleges. Currently, many of these students are receiving direct support services through formal learning disabilities programs established in over 100 California community colleges.

Many challenging questions are raised when community colleges serve students with learning disabilities. Among them are:

- What are the characteristics of adult students with learning disabilities?
- In what ways do these students learn differently from other students?
- What assessment information is needed to provide an appropriate educational program for these students?
- What is the role of the learning disabilities specialist?
- What is the relationship among learning disabilities programs, campus instruction, and other student services?

This overview provides a rationale for the formal California Community Colleges Learning Disabilities programs and, thus, a foundation for addressing the questions stated above.

In the spirit of the Education for All Handicapped Children Act (PL 94-142), passed in 1975, the Individuals with Disabilities Education Act (PL 101-476), passed in 1990, the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1991, major legislation was enacted in California under AB 77 (Lanterman, 1976) and its subsequent amendment act AB 2670 (1978). This legislation authorized programs and services for LD students in the California Community Colleges.

In addition, ACR 201 (1976) established guidelines for California community colleges with regard to disabled students. As a consequence, categorical programs were formally established at community colleges in 1976, and special funds were provided to help meet the increased costs of educating persons with disabilities, amon g whom are those with learning disabilities.

Learning disabilities are often confused with mental retardation or other disorders. However, students with learning disabilities do not necessarily lack ability. Learning disabilities have been referred to as a "hidden handicap." The handicaps of many of these students become apparent only in very specific academic or work situations. For example, one student may see and read words backwards or invert letters or numbers. Another student's learning disability may be evidenced only in her failure to follow a sequence of directions. For a third student, difficulty with visual-spatial relationships may handicap his ability to drive a car, copy material from a chalk board, or understand tables in a textbook. It is the role of all who work with community college students to identify students with learning disabilities from among those with other learning problems and then provide appropriate services.

At the majority of community colleges, a member of the college faculty who is a learning disabilities specialist coordinates services for identified students with learning disabilities. Once a referral is made to the college LD program, a battery of psycho-educational tests is administered to determine whether the student is eligible for learning disabilities assistance supported through direct cost reimburse ment and to develop appropriate educational programming. Psycho-educational assessment, however, is only one tool for identifying these students. Testing is helpful, but it cannot ensure accurate identification of every student who is learning disabled. Psychometric methods must be tempered by careful professional judgments about the referred student's educational and family background, attitudes toward testing, ethnic and racial background, and interest and motivation during testing, as well as the examiner's interpretation of the general pattern of test results.

In the past, individual community colleges have used varied procedures and criteria for identifying learning disabled students. This variability has caused some observers to question whether or not students' educational evaluations resulted in equal educational opportunity. Historically, a variety of psychometric procedures have been developed to

address these questions of variability. Among the procedures were various methods for measuring the noted variability. By definition, one component of learning disabilities is a severe discrepancy between a student's assessed intellectual ability and his or her academic achievement in the absence of any other primary handicapping condition, such as mental retardation, physical disabilities, emotional disturbance, or speech and language disabilities. The problem is to determine what magnitude of discrepancy constitutes a significant aptitude-achievement discrepancy. Which ability and achievement tests are valid and reliable for adult-aged populations? How is LD identified in students with other disabilities? Besides tests designed to measure the aptitude-achievement discrepancy, what other measures should be administered to assess the student's specific strengths and weaknesses in learning?

To address these and related eligibility questions, the Chancellor's Office of the California Community Colleges formed a research consortium with the California Association on Post-Secondary Education and Disability (CAPED) and the University of Kansas Institute for Research in Learning Disabilities (KU-IRLD) in 1981. The consortium's task was to develop the eligibility components, procedures, and criteria for the community colleges' LD programs. The consortium, known as the Statewide Learning Disabilities Project of the California Community Colleges Chancellor's Office, was funded initially through a three-year $500,000 grant awarded in 1984 by the United States Department of Education, Office of Special Education and Rehabilitative Services. The result of these efforts was the develop ment of the first standardized assessment and eligibility model used throughout the California Community College system to identify students eligible to receive learning disabilities services. This model was formally put in place as of October 1, 1987.

During the first four years of the model's implementation, a number of issues arose which necessitated an additional research study funded by the California Community Colleges Chancellor's Office. The study, completed in 1992, culminated in a revision to the model and to the definition of learning disability upon which the model was based. This revised model was fully implemented by July 1, 1994. The information presented in this summary was developed with the assistance of individuals representing many agencies and groups including faculty LD specialists, advocacy groups such as CANHC/ACLD (now LDA-CA), college administrators, the Department of Finance, the Legislative Analyst's Office, the Department of Rehabilitation, speech and language specialists, psychologists, and other community college faculty. One product of this collaborative effort was the specification of standards for the LD eligibility process (See Figure 1). These standards are described more fully in a later section. They have served as a reference for guiding the consortium through the numerous decision points in determining the eligibility process. The Model must:

- Use objective data
- Allow professional judgment
- Be implemented statewide
- Minimize bias
- Yield reliable information
- Provide sufficient scope of assessment
- Be time-efficient
- Be cost-effective
- Be compatible with the goals of the community colleges
- Distinguish LD from Non-LD
- Provide a rational basis for LD identification

FIGURE 1 *Standards for the Learning Disabilities Eligibility Process*

The California Community Colleges Learning Disabilities Eligibility Model consists of step-by-step procedures describing the assessment components, procedures, and criteria from the initial referral to the final eligibility decision. Increased consistency in eligibility procedures and a more equitable delivery of learning disabilities program services are the outcomes that result from standardizing the minimum eligibility criteria.

A comprehensive manual, *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services*, provides a detailed description of these program elements. Before the step-by-step identification procedures are described, however, it is important to present the definition of learning disabilities used within the California

Community College system. This definition serves as the foundation for the entire identification and eligibility process.

Learning Disabilities Eligibility Process

Learning Disabilities Definition

According to the Title 5 regulations (Section 56036 of Subchapter 1 of Chapter 7 of Division 6) that govern the California Community Colleges, in accordance with the State Education Code and State and Federal legislative guidelines, the definition of a learning disability is as follows:

> Learning disability is defined as a persistent condition of presumed neurological dysfunction which may exist with other disabling conditions. This dysfunction continues despite instruction in standard classroom situations. To be categorized as learning disabled a student must exhibit:
>
> - Average to above average intellectual ability;
> - Severe processing deficit(s);
> - Severe aptitude-achievement discrepancy(ies); and
> - Measured achievement in an instructional or employment setting.

To apply this definition to a particular community college student, the follow ing six assessment components must be considered. Each component relates to a facet of the learning disabilities definition. Figure 2 lists each eligibility component and illustrates the successive steps to be followed in the learning disability (LD) identification process. The process begins with the initial referral and intake screening, progresses through the four LD eligibility assessment components, and culminates with an eligibility recommendation and development of a Student Educational Contract (SEC) delineating appropriate services and educational inter ventions based on each student's individual educational limitations.

An important distinction in operationalizing this definition is made between primary and secondary learning disabilities. Learning disabilities can accompany other disabling conditions such as blindness, physical impairments, and emotional disturbance. In such instances, the learning disability is considered a secondary disability and the other disability is considered the primary disability. In deter mining appropriate services and instruction, both disabilities should be considered. This perspective permits LD specialists the greatest flexibility in specifying appropriate services and maintains the uniqueness of each categorical area. The components, procedures, and criteria described here are appropriate for deter mining both primary and secondary disabilities. They must be followed if a learning disability is considered the primary disability. If the learning disability is considered a secondary disability, all the components must be met, but the specialist has greater latitude in specifying the procedures and criteria. For example, an individual with a serious emotional disturbance or with blindness would not be able to complete the standardized assessment procedures as they are described, so the specialist would have to rely on other evidence in assessing each of the six components.

The six components of the eligibility process are organized into a "hurdle model." The hurdle model means that in order for a student to meet the eligibility model for learning disabilities, each of the six components must be met. Failure to meet any one of the components indicates that the student does not qualify for learning disabilities services and that an alternative explanation is a better con sideration for the student's apparent academic difficulties.

The choice of a multiple hurdle model was made on theoretical grounds. The theoretical concept of learning disabilities is that a common core of character istics uniquely defines the construct. If one of those characteristics is missing in the student, the presenting problem is not a learning disability. As a consequence, the multiple hurdles ensure that no single criterion is the sole basis for determining a student's eligibility. This provides a protection to the student in that it decreases the likelihood of a misidentification. Similarly, an important factor in the model is that the procedures incorporated in assessing each of the components rely on both standardized, normative measures and professional judgment. The professional's judgment directs the eligibility process, based on his or her skills and the student's presenting problems. The next section further details each of the six components in the eligibility model along with their corresponding proceduresand criteria.

Intake
Screening

Measured
Achievement

Ability
Level

Processing
Deficit

Aptitude-
Achievement
Discrepancy

Eligibility
Recommendation

FIGURE 2 Components of the Learning Disabilities Eligibility Process

Description of Components and Procedures

The following is an overview of each of the six components in the LD eligibility process. *Primary procedures* are the first choices to be considered in assessing students. These are to be used unless they are determined to be invalid. When primary procedures are considered invalid, *secondary procedures* provide the examiner with additional alternative choices for assessing each component.

1. Intake Screening Component

The Intake Screening component provides useful background information about the nature of a student's learning problems based on educational history, language proficiency, medical and family information, work history, attitudes toward learning, and specific academic skill deficits. Initially, the purpose and procedures for LD assessment are carefully explained to the student, who is then asked for his or her written consent to proceed.

The purpose of the Intake Screening component is to gather pertinent back ground information about the referred student in a systematic manner, using the *Intake Screening and Eligibility Record* materials. Based on this background infor mation, the examiner administers the *Academic Attribute Survey (AAS)* , which is used to analyze how the student's personal attributes relate to his or her learning problems. Put simply, the AAS provides a subjective appraisal of the student's perception of the severity of his or her learning difficulties.

Results from this component are not prerequisites for assessing the student on other components.However, the results can be helpful to the LD specialist in determining whether further assessment is warranted or whether some rationale other than a specific learning disability provides a better explanation for the student's achievement problems. Therefore it is recommended that this component be completed before proceeding with the other components.

Procedures

- Consent form (**required**)
- Intake Interview **(required)**
- Academic Attribute Survey **(required)**

2. Measured Achievement Component

Students with learning disabilities characteristically show inconsistencies (strengths and weaknesses) across areas of performance such as achievement, abilities, and/or aptitudes. The Measured Achievement component is designed to identify student strengths and inconsistencies in achievement, either in an instructional setting (based on individual or group tests of achievement or previous course grades), or in the employment setting (based on employer's report of the student's work history). The employment setting is most applicable to nontraditional students, that is, those students who have not matriculated uninterrupted from a high school program.

The purpose of determining Measured Achievement is to certify that the student has demonstrated achievement at an appropriate competency level in an instructional or employment setting, suggesting that the student has the potential to benefit from instruction at the community college. This component is evidenced by comparing the student's performance relative to the normative group, not by comparing his or her achievement in terms of potential or expectancy for achieve ment factors.

Procedures

Instructional Setting

Wide Range Achievement Test - Revised (1984) **(primary)**

Woodcock-Johnson Psycho-Educational Battery - Revised:
Tests of Achievement (1989) **(primary)**

Degrees of Reading Power (1989) **(primary)**

College or High School Transcripts **(secondary)**

Employment Setting

Employment verification **(primary)**

and

3. Ability Level Component

The Ability Level component is designed to assess the student's intellectual capacity to achieve in the community college setting. In addition, the component provides evidence for alternative explanations for a student's academic problems. Further, assessment results from this component can be used later in the eligibility process to determine an aptitude-achievement discrepancy.

The primary procedures for the Ability Level component are standardized, normative measures of cognitive ability. These instruments assess the student's likelihood of successful achievement in the community college. The information has predictive utility in designing and implementing appropriate instructional goals and activities for the student. Instructional programming available to students with learning disabilities assumes that the student's ability level is at least at the tenth percentile in comparison to his or her peers. There are a variety of scores from three assessment instruments that might be used to evaluate this criterion. If these instruments are judged invalid, Professional Certification may be applied.

Procedures

Wechsler Adult Intelligence Scale - Revised (1981) **(primary)**

Woodcock-Johnson Psycho-Educational Battery - Revised:
Tests of Cognitive Ability (1989) **(primary)**

Standard Progressive Matrices (1958) **(secondary)**

4. Processing Deficit Component

The student with learning disabilities lacks the ability to acquire, manipulate, integrate, store, and/or retrieve information in the manner in which most students perform these tasks. One or several of these processes may be impaired. The Processing Deficit component is completed to verify that the student's difficulty is due to one or more of these factors. Evidence of a processing deficit is critical to distinguishing students with learning disabilities from other underachieving students. However, the presence of this factor, just as with the other eligibility components, is not in itself sufficient to indicate a learning disability.

If the primary measures are used in evaluating this component, the difference between two specified factor or cluster scores is evaluated to determine if it is in fact a reliable difference, i.e., is of such magnitude that it did not occur by chance. Technically, this difference between scores is evaluated by comparing it to the standard error of the difference (SED). This SED criterion was set at a level to indicate whether a 95% chance existed that the difference in scores was a real one, as opposed to one reflecting errors in measurement. If the difference between specified scores meets or exceeds this criterion, this component has been satisfied.

The formulas for calculating the difference score and the criterion score are given in Appendix A. However, the practitioner can consult tables developed for this component and thus can avoid calculations, except for completing one sub traction operation. Alternatively, the practitioner can utilize the Computer Assisted Recordkeeping and Scoring (CARS) program to perform all necessary calculations for determining whether a student meets the criterion for this component.

Procedures

Wechsler Adult Intelligence Scale - Revised (1981) **(primary)**

Woodcock-Johnson Psycho-Educational Battery - Revised:
Tests of Cognitive Ability (1989) **(primary)**

Academic Attribute Survey-II (1993), long form (44 items) **(secondary)**

5. Aptitude-Achievement Discrepancy Component

The most commonly accepted characteristic of the student with learning disabilities is that he or she is not achieving at a level one would expect. This differ ence from expected or predicted achievement reflects the negative impact of the learning disability. The discrepancy between expected and actual achievement is calculated and evaluated in this component.

The Aptitude-Achievement Discrepancy is evaluated by comparing a student's predicted achievement in a given area, e.g., reading, math, or writing, with the actual achievement score in the same area. If the discrepancy or difference between the two scores, i.e., the predicted achievement and actual achievement, is greater than that of 92% of other students with the same aptitude score, the criterion for this component is met. The formulas for calculating (a) the predicted achievement score, (b) the discrepancy score, and (c) the criterion score are given in Appendix B. Tabled values are provided for the practitioner, so no calculations are required. These tabled values appear in the manual *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services* . Alternatively, the CARS program may be used to perform the calculations for this component.

As with the other eligibility components, a variety of reasons other than learning disability might account for a student meeting this component. Some of the more probable reasons are (a) that the student has not had appropriate instruc tion; (b) that the instruction received did not match the content of the achievement test; (c) that the student's education has been interrupted sufficiently so that there has been little consistency; (d) that the student's language differences impeded his or her performance on the achievement measure; (e) that there was an error due to the multiple comparisons made between ability and achievement; and (f) that it was due to some other disability, e.g., emotional disturbance, mental retar dation, and so on. Each of these factors is likely to increase the probability of the student evidencing an aptitude-achievement discrepancy that would meet the cri terion of this component. Thus, while the determination of a significant aptitude -achievement discrepancy is necessary for verifying a learning disability, its presence is an insufficient condition on which to base identification.

A variety of measures may be used in evaluating this component.

Procedures

Measures of Aptitude

Wechsler Adult Intelligence Scale - Revised (1981) **(primary)**

or

Woodcock-Johnson Psycho-Educational Battery - Revised:
Tests of Cognitive Ability (1989) **(primary)**

or

Standard Progressive Matrices **(secondary)**

and

Measures of Achievement

Wide Range Achievement Test - Revised (1984) **(primary)**

Woodcock-Johnson Psycho-Educational Battery - Revised:
Tests of Achievement (1989) **(primary)**

Degrees of Reading Power (1989) **(primary)**

6. Eligibility Recommendation Component

The Eligibility Recommendation Component is the last of the components in evaluating a student for learning disabilities eligibility. The procedures incor porated here all rely on the judgment of the professionals involved in the student's assessment. That is, no additional assessment instruments or cut-off scores are prescribed for making the determination. Rather, the tasks are completed by the clinician and rely solely on his or her judgment. Four tasks have been defined for the learning disabilities specialist in this component: (a) collect and summarize the results of the previous assessments; (b) evaluate the results for their sufficiency, reliability, objectivity, and validity; (c) consider alternative explanations for the student's performance in addition to learning disability; and (d) conclude which explanation is most appropriate.

The questions of the results' sufficiency, reliability, objectivity, and validity were addressed as each component was completed. They are repeated again because of their importance; in this component, the results are summarized and considered as a whole. Sufficiency refers to the comprehensiveness of the proce dures and addresses the question of whether the testing was comprehensive enough to determine the depth and scope of the student's performance on the component.

The reliability issue concerns whether the results provide a consistent rep resentation of the student's performance. If the results are not reliable, one does not have a basis for making a decision. Additional data are needed for the clinician to have a basis for knowing a student's typical response to tasks. Data can be no more valid than they are reliable.

Objectivity is closely related to reliability. The objectivity criterion is met by minimizing the judgments required by the clinician. That is, the student's own performance provides the evidence of skills and abilities, with minimal inference needed by the clinician. On this issue, the LD specialist again reviews the results to assure that they indicate an unbiased representation of the student.

The validity issue is, perhaps, the most complicated and important. If the student's performance does not reflect the construct supposedly being measured, the score is invalid. Thus, if the construct assessed by the test is reading achieve ment, but the student has minimal English skills, one would exercise caution in interpreting the student's

performance. Does the task reflect reading skills or language fluency? The resulting score may not have the same meaning as it would if a native English-speaking person were asked to complete the task. In addition, one would want to know whether students such as the one being assessed were represented in the standardization sample or if the sample was composed of only native English speakers. These four issues are all important in considering the student's performance and drawing any conclusions.

The instruments in the eligibility process are not perfect when considering the four indices just cited, just as the medical or physical sciences lack perfect tests. The fallibility of these instruments, the influence of competing values, and the multiple opportunities for the clinician's judgment in the eligibility process have possible consequences of yielding erroneous conclusions. Yet, this situation is no different than in other, comparable disciplinesthe physician's medical diagnosis, the policy analyst's policy recommendation, or the business woman's marketing plan, for example. In each instance, the decisions are weighed against some standard of expected risks and benefits. The criterion or cut-off scores set for the learning disability eligibility components were chosen to provide a balance between false positive and false negative errors, i.e., the risks and benefits of incor rectly including or excluding a student on a component. Since the agencies and participants reasoned that the worst error to make was a false negative, the cut -off scores were chosen accordingly. The consequence is that the procedures yield significantly more false positives than misses. It is important to remember that a student may meet the criteria for the first five components, but for reasons other than learning disabilities. The LD specialist must therefore complete the four steps outlined above for the Eligibility Recommendation component and may decide not to recommend the student to be eligible for LD services supported through state reimbursement, even though the student may have met the criteria for the first five components.

The bottom line for this component is the LD eligibility decision. The steps in the eligibility process can be seen as a series of hurdles, with data collection occurring at each hurdle. The LD specialist makes the final determination only after considering all the data in light of the model's standards and criteria.

Professional Certification Procedures

Each student evaluated with the LD Eligibility Model presents unique char acteristics. The eligibility model was designed to accommodate most students, but for a small group of students some assessment modifications may be needed. The Professional Certification procedure was designed to accommodate those students for whom the primary and secondary assessment procedures have been judged to be invalid. The Professional Certification procedure refers to the use of an assessment procedure to evaluate a particular student's performance on one or more of the four eligibility components to which it applies.

The Professional Certification procedure is for assessment purposes; therefore, when a Professional Certification procedure is used, the student must still meet a criterion for the component. For example, an examiner may judge that a student cannot be assessed with the primary and secondary procedures for the Ability Level component and, thus, decide to use a Professional Certification procedure. The specific Professional Certification procedure the examiner chooses must still provide information that is appropriate to the component and that can be evaluated against the component's criterion. Just because a Professional Certi fication procedure is used does not mean that the student automatically meets the criterion for the component.

The primary and secondary procedures to be used have been specified for each of the applicable components. These primary and secondary procedures must be used if the information they provide is considered valid. If neither a primary nor a secondary procedure is valid for one or more of the eligibility components, then a Professional Certification procedure should be used. The Professional Certification procedure may be completed for more than one eligibility component for a student; however, each application of the procedure must have its own documentation following guidelines presented in the *LD Eligibility Guidelines* manual. The main point underlying these guidelines is to provide sufficient written information so that others will clearly understand how this component was assessed and how the information was applied in determining whether or not the student met the criterion for the component.

Statewide Policy Issues

The California Community Colleges Learning Disabilities Eligibility Model addresses important statewide policy issues that must be considered when using these procedures. Among those discussed in this section are:

- Standards for development and implementation
- Ethical standards
- Professional judgment

These policy issues represent procedures that shaped the development of the California LD Eligibility Model. The section on Standards for Development and Implementation explains the values that govern the implementation of the LD eligibility process and that guided the development of this LD identification model. The section entitled Ethical Standards is not only a series of policy state ments, but also represents the principles of professional practice required when assessing a student for LD services. The section on Professional Judgment de scribes the procedures that will ensure the efforts of the LD specialist to deter mine appropriately a student's eligibility for LD services.

Standards for Development and Implementation

As the California Community College LD Eligibility Model was being developed initially and field-tested over a four-year period, a number of questions surfaced. Some of the most frequently asked questions are presented below.

- *What standards govern the implementation of the California Community College LD Eligibility Model?*

There is no one theoretical model for the identification of learning disabilities. Instead, procedures for the identification of LD students are based on a number of models. The development of any LD assessment model must be based on decisions stemming from the values of those who have a stake in providing or using services and funding. The values of the various stakeholders determined the set of standards that governed the development and implementation of these procedures. The model for identifying LD students in the California Community Colleges is based on eleven standards. What follows is a description of each of those eleven standards , a rationale for their inclusion, and a statement about how this eligibility model for identifying LD students in California Community Colleges meets these standards.

1. Use Objective Data

The data used to qualify students referred for LD services must be objective. Objective procedures result in a smaller chance of errors being made in placement decisions. Objective measures of LD characteristics are the foundation of the California Community College LD Eligibility Model.

2. Allow Professional Judgment

Professionals use tests to evaluate a student's eligibility for services; the *professional*, not the test, is the final judge. If judgments were based upon tests alone, unfair placement decisions might result. According to the California Community College LD Eligibility Model procedures, the final decision about test use, interpretation, and placement recommendations rests with the professional.

3. Be Implemented Statewide

In the interest of fairness, these criteria should be uniform and should be implemented statewide. Otherwise, a referred student could be determined eligible for LD services at one community college and not at another. Hence, students who transfer from one community college to another might be in jeopardy of losing LD services because of inconsistent practices among colleges. The California Community College LD Eligibility Model procedures are being implemented statewide to prevent this problem.

4. Minimize Bias

When rigid and restrictive LD evaluation procedures are adopted, the danger exists of misidentification of minority group members. LD evaluation procedures must be sensitive to the unique needs of these groups. The California Community College LD Eligibility Model procedures require the examiner to select appropriate assessment measures that will be fair to referred students and give the professional the freedom to make interpretations about how test results should be used in the best interest of the student.

5. Yield Reliable Information

A true learning disability is a relatively stable characteristic. Individuals do not experience learning disabilities in every learning situation, but there is usually consistency within learning situations. Reliable evaluation procedures will uncover these learning disabilities, but erratic or unstable measures will not. The procedures used in the California Community College LD Eligibility Model were carefully selected to provide the most reliable information about learning disabilities.

6. Provide Sufficient Scope of Assessment

Learning disabilities is a multidimensional construct. No one assessment can capture all of its facets. The best practice is to use multiple methods of as sessment based on multiple sources of information. The California Community College LD Eligibility Model permits several procedural options within each evaluation component, so the examiner is not limited to a sole criterion.

7. Be Time-Efficient

Large amounts of time spent on LD assessment do not necessarily result in reliable and valid identification. In fact, too much assessment can also result in misidentification. The answer is to select carefully the kinds of procedures to be used, based upon the referral problem and the kinds of information being sought. With advanced planning, an experienced examiner can use the California Com munity College LD Eligibility Model procedures to make the kinds of assessment decisions that will result in accurate evaluation and appropriate intervention without unnecessary time expenditures.

8. Be Cost-Effective

One goal of effective LD assessment is to conduct an accurate evaluation in a cost-effective manner. Reliability and validity of assessment results are never sacrificed to achieve cost-effectiveness; however, there must be a balance. A number of the assessments within the California Community College LD Eligibility Model may be group-administered or are self-report inventories, which result in some cost savings. Furthermore, it may not be necessary to administer all of the eligibility components to decide whether a student qualifies for LD services. Overall, the examiner's good judgment, planning, and organization may contribute most to cost-effectiveness.

9. Be Compatible with the Goals of Community Colleges

The California Community Colleges are dedicated to providing appropriate educational programs so that students may realize their full potential for educa tional growth. The California Community College LD Eligibility Model is viewed as one means by which that goal may be reached. The procedures are intended to expand the educational, vocational and career opportunities available to students attending the California Community Colleges.

10. Distinguish LD from Non-LD

The field of LD assessment is still young and dynamic. There is little consensus about what is the best procedure to distinguish LD from non-LD. Instead, the procedures are based on empirical findings from scholarly research. Careful psychometric considerations went into the development of the California Com munity College LD Eligibility Model. Modifications have been made in both LD assessment procedures and the eligibility criteria as research and development were conducted in the 1987 study and in the 1994 update. The California Community

College LD Eligibility Model procedures best serve to distinguish LD from non-LD, given what is known about learning disabilities today.

11. Provide a Rational Basis for LD Identification

The most useful LD evaluation procedures provide objective information about the nature of the referred student's learning problems in order to develop educational interventions. That is, they provide a rational basis for LD identification. The California Community College LD Eligibility Model was built on the assumption that these standards, which embody stakeholder values, should rationally guide the entire evaluation process, from referral through the six eligibility components and culminate in an appropriate educational program for each eligible student. This approach is rational because it goes beyond identification to help the LD specialist and the student plan educational programming.

Ethical Standards

- *What practices are to be followed to ensure ethical application of assessment in the Learning Disabilities Eligibility Model?*

Among the ethical standards that apply to the practice of psycho-educational assessment are the *Ethical Principles for Psychologists (APA , 1981),* the *Standards for Educational and Psychological Tests* (APA, 1985) and the *Code of Fair Testing Practices in Education* (JCTP, 1988). Tests are useful tools only when used in an ethical man ner. Consequently, the examiner has a responsibility to understand the ethical implications of assessing students who request LD services. Professionals assessing potential LD students have the responsibility to:

1. Ensure that LD eligibility assessments are conducted to broaden, not limit, student access to the educational resources of the community college, regard- less of race, sex, color, religion, disability or national origin.

2. Conduct assessments in a manner that protects the integrity and welfare of referred students as individuals who are capable of learning given the appropriate educational opportunities.

3. Consider the profound effects their recommendations may have on the lives of referred students.

4. Fully inform the student about the purpose for testing, the kinds of tests to be administered, and the intended use of the test results.

5. Explain the test results, consequences, and recommendations to the student.

6. Work toward fully including LD students in every aspect of the community college program whenever possible.

7. Be aware of test biases against minority group members and others, which may invalidate the results of the testing.

8. Ensure that the permission for testing is made on a fully informed and voluntary basis.

9. Protect the confidentiality of the information obtained in the course of the assessment.

10. Carefully check the reliability and validity of test results before using those tests to make educational decisions.

11. Consider the testing conditions when judging the reliability and validity of test results.

12. Adhere to standardized test format, mode of administration, instructions, language, and content.

13. Maintain the security of test materials and ensure their appropriate use by qualified staff.

14. Make provisions for storing and disposing of records.

15. Report any reservations regarding validity or reliability of results based on testing circumstances or inappropriateness of the test norms for the person tested.

16. Ensure that the highest ethical standards are applied to research: informed consent, confidentiality of individual results, and accurate reporting of results to the research participants.

17. Consider alternate explanations for test results before accepting test scores as an accurate reflection of the student's knowledge, skills and abilities.

18. Never use test scores to justify an educational decision that has been based largely on another factor.

19. Base educational decisions on multiple measures, using multiple sources of assessment information.

20. Recognize the limitations of their own competencies as examiners and administer only those tests they are qualified to administer and interpret.

21. Work cooperatively with other professionals to promote student growth and achievement.

Professional Judgment(1)

- *How can professional judgment best be used?*

While the determination of some conditions can be done with relative certainty, the evaluation of LD is not as clear-cut. For this reason, a number of steps have been devised to assist the professional in making proper determination. *Professional judgment consists of the careful implementation of each of these steps so that a decision can be rendered based upon all the reliable pieces of information that are available.*

Two important features must be addressed in considering how professional judgments are best made on behalf of students referred for LD evaluation and eligibility. First, this manual contains a series of procedures that must be followed carefully in order for the eligibility determination to be made with the greatest possible accuracy. Not to follow the established procedures may be tempting at times, but it is an invitation to failure. The LD Eligibility Model is devised to maximize accuracy in the LD evaluation process. If the procedures are not followed consistently, accuracy will unquestionably suffer.

The second important feature to consider is that only reliable information should be used. If the procedures are followed and the student is determined eligible or ineligible for services, the examiner's responsibility is to ensure that "hunches do not override evidence." Professionals are needed to collect and evaluate all relevant data. Professional training and experience are simply wasted if unreliable data is included.

There are a few precautions which examiners can take to minimize professional judgment errors; this will significantly improve the opportunity to reach an accurate conclusion.

1. Try not to jump to conclusions. If a hypothesis is formulated too soon, evidence may be seen later as being consistent with that premature conclusion even when the later facts are truly inconsistent. Give all the evidence a fair trial.

2. If one hypothesis becomes evident (e.g., eligible for services) as a likely conclu sion, before finalizing your thinking, be sure to give alternative hypotheses some consideration. "Can the evidence be explained just as well if I attribute it to poor English skills, poor attendance, low motivation, etc.?" Almost *any* hypothesis seems plausible when it is considered by itself. Only the best hypothesis will continue to look good after it is compared with serious con tenders.

3. Remember that repeated sampling is guaranteed to yield data of higher validity than one-shot sampling. Thus, mispronunciation of one word is not diagnostic of anything; several mispronunciations are informative. That is another good reason to hold the final conclusion in abeyance until all the data are in.

4. Some data are more valid and reliable than others. A decision should be based on the best data available. For example, if a test thought to be appropriate for a student yields one conclusion (e.g., ineligible for services), but it is noticed that the student has below-average handwriting, it would be a mistake to conclude that the handwriting quality is characteristic of LD.

5. Every scientific experiment has a control group, and LD evaluation should have one, too. If, while performing a professional certification, you note that the student has demonstrated "inconsistent test performance," remember that non-LD students aren't perfectly consistent test-takers either. The level of a behavior in a non-LD student serves as a "control group." In order for someone to give indications of LD, that student must manifest levels *above* that of the non-LD student. Just demonstrating the behavior isn't diagnostic.

6. Suppose an eligibility determination is made, and later it is learned that the decision probably was not correct. This alone is not a sufficient reason to revamp either your procedures or the testing flowchart. The determination of LD is so difficult that even the very best effort using the very best procedures cannot achieve 100% accuracy. Misclassifications will occur because perfection is not attainable. If procedures constantly keep shifting in response to each misclassification, it is most probable that: (1) consistency and, therefore, accuracy will be lowered; and (2) evaluation of the California Community

College LD Eligibility Model will be difficult. Accurate data allows for fine -tuning of the LD Eligibility Model. Until other refinements are made, the current set of procedures represents the State's and therefore each college's best process for accurate evaluation of these students.

1 This section was prepared by Dr. Hal Arkes at Ohio University. The California Community Colleges gratefully acknowledge Dr. Arkes' contribution.

Computer Assisted Recordkeeping and Scoring Program (CARS)

In 1988, plans were initiated to develop a computer program that would address the recordkeeping and scoring functions of the California Community Colleges Learning Disabilities Eligibility Model. A group of learning disabilities specialists from the colleges met with research staff from the University of Kansas Institute for Research in Learning Disabilities to review current computer programs and to identify features that would facilitate the recording, scoring, and reporting of different aspects of the eligibility process. Data processing staff from the Chancellor's Office was then assigned the task of creating the computer program to implement the recommendations of this group. The result was CARS 2.0, the first generation of the Computer Assisted Recordkeeping and Scoring program which greatly facilitated several tasks confronting learning disabilities specialists in determining students' eligibility for services. The program was designed to serve four purposes:

- **Improve Accuracy of Scoring**

Conversion of raw scores to standard scores and percentiles was difficult because of the multiple tables which accompanied the tests used in the eligibility process. CARS 2.0 accurately converted raw scores to national and California normative scores for students 18 years of age or older. In addition to calculating test scores, CARS also simplified the process of performing the comparisons used in determining a student's eligibility for services, thereby eliminating the need to review numerous tables from the *LD Eligibility Guidelines* manual and increasing the accuracy of the decision-making process.

- **Facilitate Record Management and Storage**

CARS 2.0 provided a record of students assessed by each LD specialist. This record permitted easy access for reviewing and updating information.

- **Provide Accountability**

CARS 2.0 provided a detailed measure of accountability, and the carefully sequenced steps helped ensure that students were treated consistently and equitably.

- **Provide for Research and Development**

The eligibility procedures and criteria could be carefully evaluated through the database of student assessment information, and this in formation could easily be compiled for reporting to the California Post -Secondary Education Commission (CPEC) as required during the first four years of the model's implementation.

Each community college was provided with the program disks and in structions for installing the CARS program and printing out the Training and Reference Guide. The Training Guide included lessons on running the program, entering data on the student screen, entering raw scores, reviewing the calculated scores, printing a table, determining eligibility, and using the special features of the program. The Reference Guide pro vided detailed explanations of the program's features, functions, and commands. LD specialists who chose to use the CARS program could quickly and accurately generate printouts of a student's test data and eligibility determination and maintain an up-to-date database of students assessed through the eligibility process.

When the California Community Colleges Learning Disabilities Eligibility Model was updated in 1994, it became necessary to revise the CARS pro gram to reflect changes in the model. CARS 3.0 was developed to support the revised model, including the adoption of current assessment instruments, the elimination of California norms, and the inclusion of 17 year old students. In addition to the scoring and eligibility functions, new re porting features enabled the LD specialist to generate reports summariz ing students' demographic information (e.g., age, gender, ethnicity), test results, and outcomes on the eligibility model. An expanded database function allowed for the examination of student records on any of the multiple fields of data found in the Intake Interview. In response to input from the field, the updated CARS program underwent a series of re finements and was made available to the colleges in 1996. While use of the CARS program is not mandatory, the advantages that it offers in terms of increased accuracy, time efficiency, and storage space considerations have led to widespread adoption throughout the community college system.

Major Policy Questions & Answers

In order to implement the California Community Colleges Learning Dis abilities Eligibility Model, specific programmatic questions must be addressed. In turn, such questions raise policy considerations, which then lead to formal imple mentation guidelines from the California Community Colleges Chancellor's Of fice. The policy questions and answers that follow are drawn from Chancellor's Office Disabled Students Programs and Services (DSP&S) guidelines. They are designed to assist both administrators and LD specialists in utilizing the LD Eligibility Model.

Funding for LD Assessment

Since the LD Eligibility Model is required for determining eligibility for services as a learning disabled student in the California Community Colleges, how is the assessment funded?

Anticipating the impact of the new process on resources of the Disabled Students Programs and Services (DSP&S), the Chancellor's Office submitted a budget change proposal to the governor for 1987-90. An additional $1.1 million per year was appropriated to assist with the costs of LD referral, assessment and enrollment. These funds were in addition to AB77 funds for DSP&S, which allocate dollars through the State budget process to cover the costs of serving students with disabilities in the 106 community colleges in the California Community College System. Initially the money from this additional allocation was set aside specifically for the use of LD programs to pay for the direct costs associated with the assessment. Later the money was rolled into the general allocation. The cost of assessment is now borne by the DSP&S programs through their own allocations and individual district resources. LD specialists may seek augmentation to AB77 funds within the allocation process at their colleges. In addition to the general funds received by colleges, funds from categorical or restricted sources such as matriculation and VATEA may appropriately be spent on LD assessment.

Use of Previous Test Data

- *How should previous test data be used within these LD eligibility procedures?*
- *Can test scores from the student's high school program be used?*
- *What about testing done through the Department of Rehabilitation?*
- *From outside agencies?*

Referrals for LD assessment may often require that new testing be completed, but this is not always the case. Instead, it may be possible to use test records that are *no more* than three years old to meet particular ability and achievement compo nents in the model. Previous test records may save time and avoid duplication of professional efforts.

Before deciding to use previous test records, there are two cautions to con sider. First, be sure that the source for the records is reliable. Second, previous test records may be used if the circumstances under which the original testing took place have not changed substantially. For example, if several years ago a student had been given some tests as part of a general battery to assess some personal adjustment problems, then the circumstances of that testing may preclude their use under the present circumstance of assessing for eligibility for LD services. Recent test records may be an efficient way to avoid over testing, but caution is needed in deciding when and how to use the test results. As a general procedure, use previous test scores only under the following conditions:

a. The scores may be used if they were obtained within the past three (3) years.

b. The scores may be used if they are considered valid indicators of the student's performance by the LD specialist. Here, the LD specialist would review the records and judge the validity of the information received.

c. The scores may be used if the student was 17 years old or older at the time of testing except for the WAIS-R which includes norms for 16 year old stu dents.

Note that it will not be possible to use the Computer Assisted Recordkeeping and Scoring (CARS) program unless raw scores for the tests are obtained.

Record Keeping

What principles should be followed in keeping records of assessment data?

Once the assessment process is completed and a student is determined eligible for services as a learning disabled student he or she will never have to establish eligibility again to receive services at any community college in the state of California . Although not classified as permanent records by Title 5, the eligibility record for each student should be maintained in some form to assure access to these records at any time throughout the student's educational process. This means that many student test records and reports will start to accumulate. Ideally, hard copies of test records and reports are kept confidential and stored, but realistically that may not be possible because of space considerations. If the Computer Assisted Recordkeeping and Scoring (CARS) program is used to create and store the student assessment and eligibility records, and back-up files are maintained of these records, then records should be able to be maintained indefinitely without tre mendous demand on storage space.

In any case, since these records are not classified otherwise, Title 5 considers them disposable. This means that assessment records, including the test protocols and other data used to determine eligibility, must be maintained for at least three years after the student leaves the college before they may be destroyed. Even so, if space is available, it may be prudent to keep the records longer.

Standards for Educational and Psychological Tests

How can an LD specialist ensure proper practice in test administration?

Adhere to the procedures described in the *Standards for Educational and Psychological Tests* developed and revised by the American Psychological Association (1985). Use tests only in the manner prescribed in the test administration manuals. For example, the Woodcock-Johnson Psycho-Educational Battery - Revised is an *individually administered* instrument. It should never be used as a group test. This is improper practice and constitutes educational malpractice for which the LD specialist, DSP&S administrator, and college would be held liable.

Determination Of LD Eligibility

Who can determine the eligibility of an LD student at a community college?

LD specialists who meet minimum qualications and have completed the statewide LD training in the eligibility procedures for the California Community Colleges are authorized to make the determination of LD eligibility. The LD special ist verifies in writing that each of the six eligibility components has been met by the student.
The purpose of these qualifications is to promote good practice in admin istering, scoring, and interpreting psycho-educational tests and related student information in order to make sound eligibility determinations. Appropriate coursework, minimum qualifications, and training help to facilitate statewide procedural consistancy and safeguard against claims of educational malpractice.

Minimum Qualifications for LD Specialists

What are the minimum qualifications that an individual must have in order to make an eligibility determination using the model?

Professionals in the position of LD specialist within the California Community Colleges are required to meet the minimum qualifications for instructor in the area of learning disabilities as specified in Title 5, Section 53414 (Subchapter 4 of Chapter 4 of Division 6) of the Education Code of the State of California. Determination of qualification is made by the local district in the process of hiring for the position. These qualifications require that an individual hold a Master's degree in learning disabilities, special education, education, psychology, educational psy chology or rehabilitation counseling with 15 or more graduate units in learning disabilities.

Training in the Eligibility Procedures for LD Specialists

How do LD specialists receive training in the California Community Colleges Learning Disabilities Eligibility Model?

Training for new LD specialists and *for those needing a refresher course* is offered by the California Community Colleges Chancellor's Office on a regular basis.

Training Criteria

For admission to training, each participant must meet the following criteria:

a. Show verification of current employment as an LD specialist; or provide docu mentation that he or she meets the minimum qualifications for instructor in learning disabilities as set forward in Title 5;

and

b. Provide documentation of completion of appropriate training in the Wechsler Adult Intelligence Scale - Revised (WAIS-R) or the Woodcock Johnson Psycho -Educational Battery - Revised: Tests of Cognitive Ability and Tests of Achievement.

Appropriate Use of Others in the LD Assessment Process

What are appropriate ways in which paraprofessionals and other professionals (e.g., adjunct faculty, LD instructors, and assessment technicians)can be utilized in the assessment procedure?

Paraprofessionals and other professionals assigned to the LD program work *under the supervision* of an LD specialist and carry out the duties assigned by the LD specialist. These duties may include: (1) assistance in carrying out components of the Student Educational Contract (SEC) for each LD student, (2) clerical respon sibilities in assisting the LD specialist, and (3) appropriate assessment activities.

With regard to assessment, paraprofessional and other professional staff must work *under the supervision* of an LD specialist who possesses the minimum qualifications and the Chancellor's Office training for assessing LD students. While staff may be completing graduate courses or may also possess the minimum qualifications for an instructor in learning disabilities, determination of LD eligibility is a professional task and must be completed by an LD specialist. As the professional in the LD program at each college, the LD specialist is to utilize other program staff to carry out responsibilities appropriate to the individual's level of training and expertise. If the LD specialist chooses to utilize others in the administration of any of the assessment instruments in the model, it is the LD specialist's responsibility to assure the administration is consistent with the administration standards of the eligibility model and of the instrument.

Paraprofessionals are not LD specialists. However, paraprofessionals can be encouraged to complete the necessary training required to meet the minimum qualifications so that they may apply for LD specialist positions as they become available.

Assessment of Returning Students

What is the Chancellor's Office policy regarding the assessment of students who were determined eligible and were receiving LD services prior to the implementation of the CCC LD Eligibility Model inOctober of 1987?

When the California Community Colleges Learning Disabilities Eligibility Model was implemented on October 1, 1987, provisions were made to "grandfather" any student who had been assessed using any previous model and had been receiving continuous LD services prior to that date. These students were eligible to continue receiving services from LD programs until June 30, 1990, at which time they were to be reassessed using the new eligibility criteria. Now, any student who is receiving services from LD programs in the California Community Colleges must be assessed using the LD Eligibility Model regardless of their former eligibility status within the community colleges.

Can a transfer student from another California community college who has been assessed under the LD Eligibility Model receive LD services at the receiving college?

An LD student assessed at another California community college may trans fer eligibility for LD services to any community college in California as long as appropriate documentation (copies of the six eligibility components and copies of test protocols or assessment results) has been forwarded to the receiving campus from the previous LD program. The LD specialist at the receiving campus may take a student through additional testing if, in his or her best judgment, assessment should be done to provide a current record of the student or it is necessary to provide information for the development of the Student Educational Contract (SEC); however, this assessment is not required for eligibility determination.

What about students who transfer from a college or university outside of the California Community Colleges system and have been assessed elsewhere?

At this time, all students who have been assessed elsewhere (e.g., CSU, UC, private universities, out-of-state colleges, or by other agencies or individuals) will need to be assessed as new students requesting services from the LD program. Information and test scores provided by other colleges or agencies may be used in accordance with the guidelines provided in this manual. While this may cause some problems for referring agencies, it is important to note that agencies and colleges have used procedures that vary widely and that these LD eligibility proce dures have been devised specifically for California Community Colleges in order to standardize the assessment and eligibility determination process and ensure equity across the state. There are efforts on the part of the Chancellor's Office to articulate eligibility with other systems and agencies. For example, there is a draft agreement between the California Community Colleges and the California State Universities, and discussion between the California Community Colleges and the State Department of Rehabilitation regarding articulation of eligibility is ongoing. Until agreements are formalized, however, programs wishing to receive reimburse ment for services provided to these students must determine eligibility using the California Community Colleges LD Eligibility Model.

Assessment of Students under Age 18

How are students who are under the age of 18 assessed using the LD identification and eligibility procedures?

Whereas the original eligibility model did not include norms for students under the age of 18, the newly revised model includes norms from age 17. The LD specialist may, therefore, utilize test results that were obtained when the student was younger than 18. If the student is under 18 when he or she is referred to the LD program for services, and there is no previous testing, or the tests used for previous identification are not the same as those used in the CCC LD Eligibility Model, the LD specialist must gain the permission of the student's parents to assess the student. Scores obtained from the Wechsler Intelligence Scale for Children - III (WISC-III) may be used under the assumption that the intercorrelation coefficients and the reliability coefficients are similar in magnitude to those of the Wechsler Adult Intelligence Scale - Revised (WAIS-R). The test manuals for these two instruments contain the needed information on the reliability coefficients. In addi tion, the student must have been at least 16 years of age when the instrument was administered, and the test scores cannot be more than three years old.

LD Program Eligibility for Minority Students

What is the validity of using ability and achievement scores with minority students and students from other underrepresented groups who may be LD and who have not had the opportunity to demonstrate true achievement or ability (components 2 and 3)?

In February of 1987, the Chancellor's Office of the California Community Colleges established a Task Force on Assessment and Bias as a part of the Statewide Learning Disabilities Project. The charge of the task force was to address this important question. The outcome work of this committee was a document and statewide training for LD specialists on sensitivity to cultural and linguistic dif ferences in assessment. In addition, the findings of the task force were incorporated into the LD eligibility training.

In addition, the Chancellor's Office was directed by staff of the Ways and Means Committee of the State Legislature to report on referral, eligibility, and provision of services for students participating in the colleges' learning disabilities programs. Annual reports were submitted between the years of 1987 and 1991 to the California Post-secondary Education Commission (CPEC) regarding the number of students, their ages, ethnicity and gender. In addition, the study made compari sons of students who were referred for possible learning disabilities, those who were considered for eligibility, and those who were served through LD programs in California Community Colleges. Although the study found that there were differences in referral rate among ethnic groups, with Native Americans being over-referred and Filipinos under-referred in relationship to their representation in the college population, once the referral group was established, no noteworthy differences were found across ethnic groups in terms of eligibility.

LD Program Eligibility and the Americans With Disabilities Act (ADA)

Does ADA require LD programs to serve students who have been previously identified or served as learning disabled by another institution or agency (e.g., a student who was diagnosed with a specific learning disability and served in resource programs in the K-12 system)?

According to the Americans with Disabilities Act, a qualified individual with a disability is any person that has a physical or mental impairment that substantially limits one or more major life activities and that has a record of such an impairment or has been regarded as having such an impairment. If requested, it is the responsibility of the *college* to provide services to any individual who meets these criteria. Although not legally obligated to serve this population, Disabled Students Programs and Services (DSP&S) offices are usually given this responsibility on their campuses. Colleges cannot, however, request reimbursement for services provided to LD students who have not been determined eligible using the California Community Colleges Learning Disabilities Eligibility Model. It may be in the best interest of the LD specialist to reassess these students so that the program can be reimbursed for the services used by them.

Special Class Admittance

Can only LD students be served in courses designed to serve students with learning disabilities?

Under the Education Code every class that does not have a prerequisite that meets Title 5 guidelines for prerequisites is an open class (Section 51006 of Subchapter 1 of Chapter 2 of Division 6.) These guidelines do not allow prerequisites such as "eligibility for learning disability services" or "consent of the LD specialist." In addition, classes cannot be designated "special" unless 50% or more of the students enrolled in the class have a verified disability and are registered with the DSP&S office. The program may add a departmental recommendation such as

"designed for students with learning disabilities," to discourage students who are not disabled from enrolling in special classes, but they may not restrict enroll ment to disabled students.
It is important to note that with the raising of academic standards and empha sis on the new course requisites and prerequisites, all community colleges will be reviewing each course in the catalog for compliance with the new Title 5 regulations regarding curriculum, Sections 55200-02 (Subchapter 1 of Chapter 6 of Divi sion 6.) Local curriculum committees now have jurisdiction over approval of new courses including special classes designed for disabled students. Coordination between LD specialist, program coordinator, and supervising administrator is critical to ensure that courses already in place are in accordance with the new regulations, or, if necessary, are reviewed and revised in cooperation with the campus curriculum committee.

Curriculum Requirements of the LD Program

Can the LD specialist require that several courses be taken by an LD student as a prerequisite to continuing enrollment in the LD program and to receiving supportive services through DSP&S?

No. Specific LD courses may be required of LD students only if they are developed as prerequisites to additional courses in the program. Course prereq uisites must meet the Title 5 guidelines for prerequisites and must be valid and necessary for participation in subsequent courses. Supportive services must be provided as a part of the student's educational contract and may not be denied if the student meets Title 5 regulations for eligibility as a disabled student. The LD specialist is not allowed to deny services to those who are making measurable progress, as defined by Section 56010 (Subchapter 1 of Chapter 7 of Division 6) of the Title 5 regulations governing DSP&S.

Repeatability of Special Classes

How many times may an LD student repeat a special class?

All special classes are first subject to the course repetition standards for all courses set forth in Sections 55761-63 and 58161 for repetition (Chapter 2 of Division 6.) However, Section 56029 of the Title 5 regulations governing DSP&S authorizes districts to permit additional repetitions of special classes to provide an accom modation to a student's educational limitations pursuant to state and federal nondiscrimination laws. Although colleges have the ultimate responsibility for setting policy on this subject, the regulation indicates that repetition should be permitted whenever it is necessary to allow the student to make progress toward fulfilling the goals of the SEC, either by acquiring additional skills or by preparing for other courses. Thus, any repetition which facilitates measurable progress is permitted under this section. Specifically the regulation allows repetition under any of the following circumstances:

(a) When continuing success of the student in other general and/or special classes is dependent on additional repetitions of a specific class;

(b) When additional repetitions of a specific special class are essential to completing a student's preparation for enrollment into other regular or special classes;

or

(c) When the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further the achievement of that goal.

It should be noted that although this section does not address additional repetitions of regular classes, colleges are encouraged to provide for repetition of such classes where repetition is required for an individual student with a disability as reasonable accommodation under Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794).

Measurable Progress

What is the definition of measurable progress for an LD student?

As part of the student responsibilities set forth in Section 56010 of Title 5, students receiving services from DSP&S are required to make measurable progress. Measurable progress is determined individually for each student in the Student Educational Contract (SEC). Using the information gathered through the eligibility assessment process and other diagnostic procedures, goals are established by the LD specialist and the student that meet the specific academic and vocational needs of that student. These goals may specifically define the degree of improvement in an academic or skill area or may more broadly specify the completion of a particular course or program of study. In either case measurable progress is determined by comparing the student's achievement to the goal established in the SEC. If the student is enrolled in a regular course, the standards for measurable progress may not be more stringent than the academic standards established by the college pursuant to Subchapter 8 (commencing with Section 55750) of Chapter 6 of Division 6 of Title 5.

Serving Students with Other Disabilities

Can students with other disabilities be served in the LD program?

In order to receive support services and/or instruction in the LD program, a student must be appropriate for that particular program. That is, the student's SEC must identify the particular functional limitations and strategies or interventions that are needed and that would be specifically provided through the LD program. The LD assessment model is based on an underlying assumption that LD exists across the ability and disability spectrum. For example, a student with an acquired brain impairment may exhibit a visual perceptual deficit for which an LD specialist may be able to provide a particular intervention. Therefore, the particular LD class may very well be appropriate for that particular student.

However, the LD program is not designed for underprepared students whose needs are best served in remedial programs or for developmentally delayed learners (DDL) whose needs may best be served in a DSP&S DDL program.

How does one assess LD as a secondary disability?

With regard to assessing students with other disabilities, the LD specialist is responsible for verifying any primary and/or secondary disability designated as LD. The LD specialist may or may not do comprehensive testing on a student whose secondary disability is LD. This depends on the expertise of the LD specialist in judging whether there is enough assessment information on file to develop an appropriate Student Educational Contract (SEC) denoting strategies and interventions appropriate for this student, in accordance with the goals and objectives of the particular LD special class or support service provided. The point here is *appropriateness* of the particular student to be served in the LD program.

Regarding students who have been referred to the LD program or who have been assessed by the LD specialist and who are verified as developmentally delayed learners or students with acquired brain impairment, LD cannot exist as a secondary disability for funding purposes. Review the material in the Learning Disabilities Definition section for additional information on distinguishing primary and secondary learning disabilities.

Verification of Students Who Are Developmentally Delayed Learners (DDL)

Who is qualified to assess and verify developmentally delayed learners (e.g., mental retardation, developmental disabilities?)

In 1990 the Chancellor's Office established a task force of professionals from DDL programs in the California Community Colleges to determine the param eters for verification of eligibility for DDL services. A report of findings was pub lished in March of 1993 along with *Eligibility Guidelines for Developmentally Delayed Learners* and a form to be used for verification. These guidelines identify the docu mentation required to verify DDL and specify who in DSP&S is authorized to perform this verification. The DDL specialist or the DSP&S program

coordinator are the only professionals authorized to determine DDL eligibility. Although the LD specialist may provide the assessment, the LD specialist may not determine a student's eligibility for DDL services unless he or she also meets the minimum qualifications for working with this population.

If there is sufficient evidence upon referral to the LD program that the student may be DDL (e.g., documentation of prior diagnosis or service by Regional Center, Department of Rehabilitation, special education, or sheltered employment), the student should be referred to the college's DDL program or to the appropriate college or community resource that provides assessment, instruction and/or services to students who are DDL. When a DDL determination may be appropriate for a student who has completed the LD eligibility assessment (i.e., the LD specialist has signed off on each of the six components administered), the student should be referred, with copies of the testing results, to the DDL specialist or DSP&S coordi nator to complete the DDL verification form. Although the LD specialist is not qualified to determine eligibility, he or she *may* provide services through the LD program only if he or she determines that the service is *appropriate* for the student. A DDL student may not be restricted from special classes for LD; however, the SEC for that student should specify the guidelines for measurable progress. In cases where the service or instruction within the LD program is inappropriate, a referral should be made to another on-campus or community resource that can better assist the student.

If large numbers of these students are not meeting the LD eligibility criteria and are being referred to the LD program, it is advised that the LD specialist meet with the DSP&S program coordinator and supervising administrator to assist in the development of an appropriate DDL program with trained faculty who can provide support services and instruction for this population.

Discontinuing the LD Assessment Process

Should the LD specialist discontinue the LD assessment process when evidence and/or assessment results show that the student is inappropriate (e.g., the criterion may have been valid but the student was clearly not appropriate for the LD Program)?

The LD specialist must complete component 6.0 and provide appropriate documentation in the rationale section describing the reasons why the student was not appropriate for the program. For example, the student may have complained about test anxiety and poor grades on classroom exams, yet the student might have demonstrated high functioning on the ability and achievement components across the board. In this case, testing would be discontinued, component 6.0 completed, the rationale provided, and the student referred to another appropri ate campus or community program that better meets his or her needs.

Also, if a student does not meet the criteria for any one component, the LD specialist may discontinue assessment with that component and determine ineli gibility on component 6.0.

It should be noted that the LD specialist is required to sign the Intake Interview and Eligibility Record for each of the components completed, regardless of whether or not the student met the criterion.

Appropriate Use of Individual Assessment Instruments

- *Can the LD specialist administer the Woodcock Johnson - Revised (WJ-R) as a group test?*
- *Can the WJ-R: Tests of Cognitive Ability be used as a pre- and post-test?*
- *What group tests are appropriate?*

No, the Woodcock-Johnson is an instrument that is *individually administered.* The norms are based on an individual administration of this test. The WJ-R and the Wechsler Adult Intelligence Scale - Revised (WAIS-R) should never be admin istered in a group setting; if they were, test results would not be valid. In addition, ability tests such as the WJ-R: Tests of Cognitive Ability are not generally used as pre- or post-tests since it is assumed that the construct of ability remains fairly stable throughout life for each individual. Most group and individual achievement tests that are normed for adults would be appropriate to use as pre- and post-tests.

The *California Community Colleges' Eligibility Guidelines for Learning Dis* abili*ties Services* manual provides a discussion of tests used in the LD eligibility model which can be administered in a group. For example, because the Wide Range Achievement Test - Revised is a timed test and because the original validation study showed no difference in individual vs. group administration on the spelling and arithmetic sub-tests, these may be administered in a group setting. The manual includes directions for group administration. The Degrees of Reading Power and Standard Progressive Matrices may also be administered in a group setting.

Standard Error of Measurement

When may the standard error of measurement be used?

The standard error of measurement (SEM) found in the *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services* manual may be used *only* for the Measured Achievement and Ability Level Components (components 2.0 and 3.0). For these two components, the SEM can be added to the student's obtained score. The sum is then compared to the criterion score for the appropriate component. It cannot be used for the Processing Deficit or Aptitude-Achievement Discrepancy components (components 4.0 and 5.0).

Case Study

This case study demonstrates the use of the eligibility criteria and procedures utilized in the LD Eligibility Model. In this case study, a referral is worked through each of the six components in the model. The intent of this exercise is five-fold:

- To model the use of the California Community Colleges LD Eligibility Model.
- To model the procedures used in the eligibility evaluation process.
- To demonstrate the use of the assessment and scoring procedures and the Intake Screening and Eligibility Record found in the *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services* manual, hereinafter referred to as the *LD Eligibility Guidelines.*|

- To demonstrate the correct use and interpretation of the tests used for evalua tion.
- To show how the Eligibility Recommendation component is used to analyze and interpret the test results.

The name of the individual described in the following case is fictitious, but this case represents an adult referred for LD evaluation in a typical community college. It is presented from the perspective of the community college learning disabilities specialist. The six components of the LD Eligibility Model are described below.

Referral

At the time of referral, Shelly had been attending a California community college for ten semesters. Previously, she had been enrolled in a college study skills course, and her instructor suggested that she consider being assessed for LD services. At the time of referral, Shelly was 26 years old. She indicated that she felt she had a hard time with school and had always felt "behind" other students.

1. Intake Screening Component

At her first appointment, Shelly was told about the college's LD program and was asked to sign the consent form in the Intake Screening and Eligibility Record, thereby giving her consent to proceed with the evaluation process.

Shelly's responses to the Intake questions indicated that she had successfully completed approximately 40 units of college coursework. She reported that she had received speech services in elementary school, but despite always feeling like she "was behind everyone else", had never been enrolled in special education classes. She reported that her sister had had a reading problem when she was younger and that she (Shelly) had received corrective vision treatment to strengthen a lazy eye. She also indicated that she presently experiences problems with concentration. Her stated goal was to complete her general education requirements for her Associate's degree, but she had not declared a major at that time.

As part of the Intake Screening component, Shelly completed the Academic Attribute Survey (AAS). Her self-reported learning characteristics on the AAS were compared with those of other students enrolled in the California Community Colleges. (The Academic Attribute Survey and the directions for administration and scoring are found in the *LD Eligibility Guidelines* .) Shelly's AAS Cluster score of 66 satisfied the established criterion score. Her score was recorded in the Intake Screening and Eligibility Record. Since the criterion for the AAS was met and the first component was completed, the next component, Measured Achievement, was assessed.

2. Measured Achievement Component

The Measured Achievement Component is designed to assess the consistency of achievement in an instructional or employment setting. The Measured Achieve ment Component investigates whether the student has the potential to "benefit from instruction" at the community college and assesses the student's skill level across a range of academic areas or in an employment setting.

The Broad Reading, Broad Math and Basic Writing clusters of the Woodcock -Johnson Psycho-Educational Battery - Revised and the spelling subtest of the Wide Range Achievement Test - Revised were administered. Shelly's highest level of performance was in reading recognition. She received a standard score of 88 on the Letter-Word Identification subtest of the WJ-R.

Based on her score of 88, which was greater than the criterion score of 81, Shelly met the criterion for the Measured Achievement Component. Validity checks were positive. Shelly's score was recorded in the Intake Screening and Eligibility Record, and the examiner proceeded to the next component, Ability Level.

3. Ability Level Component

The Ability Level component is designed to assess the current ability of the student to achieve in the community college setting. The Wechsler Adult Intelli gence Scale - Revised was administered to assess Shelly's ability level. Shelly's strongest score was on the Performance Scale. She received a standard score of 99. When compared with other adults within her normative group, Shelly's per formance abilities fell within the average range. Procedural and administrative validity checks were positive. Since Shelly's score of 99 exceeded the criterion score of 80, she met the criterion for component 3.0. The examiner recorded her scores in the Intake Screening and Eligibility Record and proceeded to the fourth component, Processing Deficit.

4. Processing Deficit Component

The Processing Deficit Component is intended to identify information -processing deficits, which are likely to be the basis of a learning disability. Shelly was assessed for a processing deficit using the Wechsler Adult Intelligence Scale - Revised. Her subtest, scaled, and factor scores were calculated using the Examiner's Manual and the tables contained in the *LD Eligibility Guidelines.*

The scores for the Verbal Scale, Performance Scale, and Full Scale in addition to factor scores for Verbal Comprehension, Perceptual Organization and Freedom From Distractibility derived from the age-based scaled scores were analyzed. The Verbal Scale score was subtracted from the Performance Scale score, resulting in a difference score of 18 points. The Freedom From Distractibility score was subtracted from the Perceptual Organization score, resulting in a difference score of 18 points. The Verbal Comprehension score was subtracted from the Perceptual Organization score, with a difference score of 14 points. In each of these three examples, Shelly's difference scores exceeded the established criterion scores of 9, 10 and 10, re spectively. Shelly demonstrated a statistically significant discrepancy between her verbal and non-verbal abilities, with the latter representing an area of relative strength and the former an area of relative weakness. Furthermore, Shelly's low score on the Freedom From Distractibility factor suggests possible difficulties with attention and concentration. These processing deficits would account for many of the problems Shelly experiences in school. She does not process information, particularly verbal information, as efficiently as the average person. Procedural and administrative validity checks were positive. Having met the criteria for multiple processing deficits, Shelly's test scores were recorded in the Intake Screening and Eligibility Record, and the examiner proceeded to the Aptitude-Achievement Discrepancy Component.

5. Aptitude-Achievement Discrepancy Component

The Aptitude-Achievement Discrepancy Component represents a compari son between measures of aptitude and achievement. This comparison provides evidence of how much an individual is achieving in relation to predicted achieve ment. To assess the aptitude-achievement discrepancy, an aptitude and an achievement test were selected and the results compared. Shelly's standard score on the Performance Scale of the Wechsler Adult Intelligence Scale - Revised was 99. On the spelling subtest of the Wide Range Achievement Test - Revised, she had a standard score of 73. Using the appropriate table in the *LD Eligibility Guidelines*, the examiner selected the appropriate number from the age-based reference column associated with the discrepancy pairing for the WAIS-R, PIQ and WRAT-R spelling subtest. The column reference number for this pairing was 15. Using Table 5.13, the examiner located

Shelly's score of 99 and the column reference value of 15. The row and column intersected at the score of 78. Shelly's discrepancy score of 73 was less than the criterion score of 78, thus meeting the component's criterion. The procedure was considered valid. This same procedure was followed for additional test score pairings. In addition to her aptitude-achievement discrep ancy in spelling , Shelly demonstrated aptitude-achievement discrepancies between her Performance IQ and her applied mathematics skills and her written language mechanics skills. After recording Shelly's score in the Intake Screening and Eligibility Record, the LD specialist proceeded to the Eligibility Recommendation Component.

6. Eligibility Recommendation Component

The final step in the LD Eligibility Model is the Eligibility Recommendation Component. At this step in the process, it is the examiner's job to systematically compare and judge the consistency and patterns across all of the information collected in components 1.0 through 5.0. The Eligibility Recommendation is based on the reliability of the test results in the other components, testing conditions, and characteristics of the student that may have affected test performance.

In Shelly's case, meeting the eligibility criterion for each component was a positive indicator of a learning disability. Furthermore, validity checks showed the procedures to be accurate and fair measures of Shelly's abilities. No better alternative explanations could be found for Shelly's academic deficits and pro cessing problems than a learning disability. For these reasons, the LD specialist recommended that Shelly be eligible for community college learning disability services. The final step in completing this component involved reviewing the results and the eligibility recommendation with Shelly and obtaining her signature on Component 6.0 of the Intake Screening and Eligibility Record.

Appendix A

Computations in the Processing Deficit Component

When the Wechsler Adult Intelligence Scale - Revised (WAIS-R) or the Woodcock-Johnson Psycho-Educational Battery - Revised: Tests of Cognitive Ability (WJ-R Cognitive) are used for this component, there are two calculations required. The first calculation is determining the difference between the two chosen scales, which is a relatively easy subtraction operation. This is the only operation the practitioner must complete because the second calculation has been completed and necessary values have been tabled. These tabled values can be found in the *California Community Colleges' Eligibility Guidelines for Learning Disability Services* manual.

If the WAIS-R is used, two of five WAIS-R scores might be used in this com ponent. The appropriate pairings of scores are listed below. The scores for the Ver bal comprehension, Perceptual organization and Freedom from distractibility fac tors are based on the age based scaled scores. Note that the Verbal and Performance Scales are used only in one pairing. The only appropriate score pairings are:

Verbal Scale IQ	- Performance Scale IQ
Verbal comprehension	- Perceptual organization
Verbal comprehension	- Freedom from distractibility
Perceptual organization	- Freedom from distractibility

Whereas the WAIS-R restricts the combinations of scores to be subtracted from one another, when the WJ-R Cognitive is used any combinations of two scores can be subtracted from one another. The following list includes the 21 possible combinations:

Long Term Retrieval	- Short Term Memory
Long Term Retrieval	- Processing Speed
Long Term Retrieval	- Auditory Processing
Long Term Retrieval	- Visual Processing
Long Term Retrieval	- Comprehension-Knowledge
Long Term Retrieval	- Fluid Reasoning
Short Term Memory	- Processing Speed
Short Term Memory	- Auditory Processing
Short Term Memory	- Visual Processing
Short Term Memory	- Comprehension-Knowledge
Short Term Memory	- Fluid Reasoning
Processing Speed	- Auditory Processing
Processing Speed	- Visual Processing
Processing Speed	- Comprehension-Knowledge
Processing Speed	- Fluid Reasoning
Auditory Processing	- Visual Processing
Auditory Processing	- Comprehension-Knowledge
Auditory Processing	- Fluid Reasoning
Visual Processing	- Comprehension-Knowledge
Visual Processing	- Fluid Reasoning
Comprehension-Knowledge	- Fluid Reasoning

The difference of the scores is obtained by subtracting one value from another. The absolute difference between scores is the value used in judging whether the component is met.

The difference value obtained above (through subtraction) is compared to a criterion score, which is specific to each test pairing. Again these values are tabled in the *Guidelines* manual. The criterion scores were set in order to identify the differences among test combinations not likely to occur by chance. That is, a reliable difference is a difference between two scores which 95 percent of the time would not occur by chance. The standard error of the difference statistically defines the magnitude of difference not expected by chance. The criterion score is calculated using the following formula for the standard error of the difference (SED)

$$SED = (1.96)\,(SD)\,(2 - r_{xx} - r_{yy})^{1/2}$$

where:

1.96 = the z-score for setting the 95% confidence interval

SD = the standard deviation of the test

r_{xx} = the reliability coefficient for one test, i.e., internal consistency coefficient

r_{yy} = the reliability coefficient for the second test, i.e., internal consistency coefficient

The component is evaluated by comparing the difference score from the two scales with the SED value calculated for that particular test pairing. If the difference score is equal to or greater than the criterion value, the component has been met.

APPENDIX B
Computations in the Aptitude-Achievement Discrepancy Component

When standardized instruments such as the Wechsler Adult Intelligence Scale - Revised, Woodcock Johnson Psycho-Educational Battery - Revised: Tests of Cognitive Ability and Tests of Achievement, Wide Range Achievement Test - Revised and the Degrees of Reading Power are used for this component, three formulas are used in forming the discrepancy and calculating the discrepancy score. These tests yield standard scores with a mean of 100 and a standard deviation of 15. However, these formulas are not used by the practitioner, who needs only to compare the student's obtained achievement score with the tabled criterion score. The tabled criterion score can be found in the *California Community Colleges' Eligibility Guidelines for Learning Disabilities Services* manual.

The first formula in this component is used to calculate the predicted achievement score. The second formula is used to form the discrepancy between the predicted achievement score and the student's actual achievement score. The third formula calculates the criterion score against which the discrepancy score is compared.

A variety of aptitude-achievement discrepancy formulas are available. The aptitude-achievement discrepancy formula chosen for this eligibility model is a regression formula based on a prediction model. The basic tenet of the prediction model is that the student's predicted achievement is best represented by the achievement score earned by other students of the same ability/aptitude level. Formula (1) is used to calculate the student's predicted achievement score. The predicted achievement score will change according to the earned aptitude score. It is calculated as follows:

Predicted achievement = r_{xy} (Apt - 100) + 100 (1)

where:

r_{xy} = the correlation between the aptitude and achievement measure

Apt = the student's earned aptitude score

The discrepancy is formed by subtracting the student's earned achievement score from the predicted achievement score. Of course, if the predicted achievement is less that the student's earned achievement score, the discrepancy indicates over achievement, not under achievement. Students with learning disabilities underachieve relative to their ability level. Formula (2), which follows, is used to calculate the discrepancy:

Discrepancy = Earned achievement - Predicted achievement (2)

where:

Predicted achievement = result from formula (1)
Earned achievement = student's earned achievement score from the achievement test

The discrepancy score is evaluated against criterion, which indicates the severity of the under achievement. The numerical index is based on the frequency with which a given discrepancy score occurs in the population. If the discrepancy score occurs infrequently it is considered severe.

For purposes of the eligibility model, a discrepancy is judged severe if the discrepancy score is large enough to occur in 7% or less of the general population. The criterion is calculated by multiplying the chosen z-score, which is 1.5 in this eligibility model, by the test's standard deviation. The product is then multiplied by the square root of the difference between the square of the correlation coeffi cient for the tests used and 1. Formula (3) is as follows:

Criterion discrepancy = (Z) (SD) $(1 - r_{xy}^2)$ 1/2 (3)

where:

Z = the z-score chosen to indicated the significance level of the under achievement as reflected in the frequency with which the discrepancy score occurs

SD = the standard deviation of the aptitude and achievement test

r_{xy} = the correlation between the chosen ability measure and the achievement test

The discrepancy in formula (2) must be at least as large as the criterion score calculated in (3) to meet the component. The criterion provides the objective standard to which the severity of the discrepancy can be compared.

BEST COPY AVAILABLE